

APPENDIX A

Inputs: transmitted_signal(1), received_signal (2)

Output: output_signal going to the network (3)

5 Start:

Calculate the power of the signal to be broadcast by the handset speaker;

$AbsY = (1-\alpha)AbsY + \alpha * abs(transmitted_signal);$

Chose the mask that corresponds to the power of the signal to be broadcast by the handset speaker;

10 Mask = Mask_select(AbsY);

Output_signal = received_signal AND Mask;

Go to Start;

where:

15 transmitted_signal is the signal received by the telephone device to be broadcast by the handset speaker;

received_signal is the echo signal picked up by the handset microphone and voice signals picked up by the handset microphone;

alpha is an IIR filter parameter; and

20 Output_signal is the signal output to the network by the telephone device.

00000-11111111

APPENDIX B

Power Level Calculation Routine

```
5  if AbsY > AbsY0
    AbsY=(1- alpha_slow)*AbsY + alpha_slow *AbsY0;
    else
    AbsY=(1- alpha_fast)*AbsY + alpha_fast *AbsY0;
    end
```

10

Mask Selection Routine

```
Mask_select:
15  Mask = 64512;      %fc00 or 10 zeros (1111110000000000)
    if AbsY < 4063
    Mask = 65024;      %fe00 or 9 zeros
    end
    if AbsY < 2031
    Mask = 65280;      %ff00 or 8 zeros
20  end
    if AbsY < 1015
    Mask = 65408;      %ff80 or 7 zeros
    end
    if AbsY < 507
25  Mask = 65472;      %ffc0 or 6 zeros
    end
    if AbsY < 253
    Mask = 65504;      %ffe0 or 5 zeros
    end
30  if AbsY < 126
    Mask = 65520;      %fff0 or 4 zeros
    end
    if AbsY < 63
    Mask = 65528;      %fff8 or 3 zeros
35  end
    if AbsY < 31
    Mask = 65532;      %fffc or 2 zeros
    end
    if AbsY < 15
40  Mask = 65534;      %fffe or 1 zero
    end
    end
```